

What is claimed is;

1. A map data transmitting method, comprising steps of:  
setting a specific route;  
specifying map data contained in a slicing range within  
5 a predetermined distance from the route having been set based  
upon map data that include road data and background data;  
newly creating a new polygon data if an original polygon  
data contained in the background data included in the specified  
map data is partially contained in the slicing range and another  
10 portion of the original polygon data is outside the slicing  
range, by removing polygon data corresponding to the portion  
outside the slicing range from the original polygon data; and  
transmitting a road map specified in correspondence to  
the map data and background data containing the new polygon  
15 data.

2. A map data transmitting method according to claim 1,  
wherein:

in the transmitting step, either the original polygon  
20 data or the new polygon data are transmitted based upon data  
volumes of the original polygon data and the new polygon data.

3. A map data transmitting method according to claim 2,  
wherein:

25 in the transmitting step, either the original polygon

data or the new polygon data are transmitted based upon a difference between the data volumes of the original polygon data and the new polygon data.

5 4. A map data transmitting method according to claim 2, wherein:

in the transmitting step, either the original polygon data or the new polygon data are transmitted based upon an areal ratio of the original polygon data and the new polygon  
10 data.

5. A map data transmitting method according to any of claims 2 through 4, wherein;

when the new polygon data are transmitted, information  
15 indicating that the new polygon data are transmitted is appended to transmission data being transmitted.

6. A map data transmitting method according to any of claims 1 through 5, wherein:

20 the route which is set is a recommended route calculated based upon a current point and a destination indicated in a route search request having been transmitted.

7. A map data transmitting apparatus that executes a map  
25 data transmitting method according to any of claims 1 through

6.

8. An information terminal comprising:

5 a reception unit that receives map data transmitted from  
a map data transmitting apparatus according to claim 7; and  
a display unit that displays a map based upon the map  
data having been received.

9. An information terminal according to claim 8 further

10 comprising:

a requesting unit that issues a request for the new  
polygon data.

10. An information terminal that receives map data having

15 been transmitted and displays a map, comprising:

a reception unit that receives map data which include  
road data and background data corresponding to a slicing range  
within a predetermined distance from a route having been set;

20 a creation unit that newly creates a new polygon data,  
if an original polygon data contained in the background data  
included in the map data is partially contained in the slicing  
range and another portion of the original polygon data is  
outside the slicing range, by removing polygon data  
corresponding to the portion outside the slicing range from  
25 the original polygon data; and

a display unit that displays a map based upon the map data and the new polygon data having been received.

11. A map data transmitting method comprising steps of:

5 setting a specific route;  
extracting a road map corresponding to a first slicing range within specific distance from the route having been set and background data corresponding to a second slicing range within specific distance from the route having been set, based  
10 upon map data that include road data and background data; and  
transmitting the road data and the background data having been extracted.

12. A map data transmitting method according to claim 11,

15 wherein:

in the extracting step, if an original polygon data contained in the extracted background data is partially contained in the second slicing range and another portion of the polygon is outside the second slicing range, polygon data  
20 are newly created by removing polygon data corresponding to the portion outside the second slicing range from the original polygon data and background data containing the new polygon data are transmitted.

25 13. A map data transmitting method according to claim 11

or claim 12, wherein:

the route which is set is a recommended route calculated based upon a current point and a destination indicated in a route search request having been transmitted.

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14. A map data transmitting apparatus that executes a map data transmitting method according to any of claims 11 through 13.

10 15. An information terminal, comprising:

a reception unit that receives map data transmitted from a map data transmitting apparatus according to claim 14; and a display unit that displays a map based upon the map data having been received.

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16. An information terminal according to any of claims 8 through 10 and claim 15, wherein:

the new polygon data are displayed in a display mode which indicates that the polygon data on display are different from the original polygon data.

17. A map data transmitting system, comprising:

a map data transmitting apparatus according to claim 7; and

25 an information terminal according to claim 8.